

Background

- Carbon/GHG emissions reduction goal 20% below 1990 levels
- 2005 GHG Emissions Inventory (vs.1990) 35% increase in community emissions 18% decrease in municipal emissions
- Implementation plans for 7 new measures adopted Stakeholder participation & feedback
- 6-month progress report

Partial implementation based on available funding



CLIMATE PROTECTION MEASURES

- Clean Vehicle Replacements for City
- Encourage Clean Vehicle Replacements for City-Contracted Fleets
- #3 Business Energy Assessments
- #4 Green Building Standards
- #5 Energy Efficiency & Solar Conversions
- #6 Smart Growth Around Trolley Stations
- #7 Lawn Turf Conversion Program

CLIMATE PROTECTION MEASURES

Administration

- · Monthly coordination meetings with City Manager
- · Stakeholder outreach continues

Bilingual outreach flyers Newspaper postings Website updates Public meetings/RCC

- Preparation of 2007 GHG Emissions Inventory
- New Local Government Reporting Protocols **ICLEI** Climate Registry

CARB



CLIMATE PROTECTION MEASURES

#1 High Efficiency/Alternative Fuel Replacement Vehicles for City Fleet

Require that 100% of the replacement vehicles purchased for the municipal fleet be high efficiency (hybrid) or alternative fuel vehicles (AFVs)







CLIMATE PROTECTION MEASURES

#1 High Efficiency/Alternative Fuel Replacement Vehicles for City Fleet

Status:

- 5 light-duty vehicles replaced this FY 1 Hybrid
- 14 total hybrids/AFVs in City's fleet
- 128 medium & heavy-duty vehicles (diesel) will be converted to biodiesel

Currently insufficient fuel storage capacity



#1 High Efficiency/Alternative Fuel Replacement Vehicles for City Fleet

Next Steps:

- Seek funding to install new fuel tanks at PWC One 10,000-gallon tank (\$200,000)
- Included in Economic Stimulus Package submittal
- CIP funding for FY 2009/2010



CLIMATE PROTECTION MEASURES

#2 High Efficiency/Alternative Fuel Replacement Vehicles for City-Contracted Fleets

Encourage City-contracted fleet operators to adopt the use of high efficiency (hybrid) or alternative fuel vehicles (AFVs) by stipulating that 100% of replacement vehicle purchases should be alternative fuel or hybrid vehicles







CLIMATE PROTECTION MEASURES

#2 High Efficiency/Alternative Fuel Replacement **Vehicles for City-Contracted Fleets**

Status:

- 5 CNG buses added to Transit Fleet 90% of fleet converted
- Allied Waste to convert to biodiesel fleet Within 2 months New biodiesel company (New Leaf)
- Street Sweeping contract expires June '11
- Tow Truck contract expires June '11





CLIMATE PROTECTION MEASURES

#2 High Efficiency/Alternative Fuel Replacement **Vehicles for City-Contracted Fleets**

Next Steps:

• MTS approved 2 additional CNG buses for Transit Fleet in FY2009/2010

95% of fleet converted



CLIMATE PROTECTION MEASURES

#3 Business Energy Assessments

Encourage City of Chula Vista-licensed businesses to participate in an energy assessment of their physical premises every three years and upon change of ownership







CLIMATE PROTECTION MEASURES

#3 Business Energy Assessments

Status:

- · New municipal ordinance passed
- · No-cost assessment integrated into business licensing renewal process 4,500 eligible

58 participating (since 1/1/09)

• On-site assessments include: Lighting Envelope HVAC

Appliances **Energy Bills** Water Use Efficiency





#3 Business Energy Assessments

Next Steps:

- Track participant #s & identified energy saving opportunities
- Assess a variety of marketing approaches
- Integrate into new Chula Vista CLEAN Business Certification program





CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Adopt mandatory, citywide green building and energy efficiency standards that would apply to residential and non-residential projects







CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Original Components:

- Early adoption of CA Green Building Standards Code (HCD Version)
- Carbon savings benchmark equivalent to 15% above energy efficiency standards
- 3. Mitigation fee program option
- 4. Green awareness program
- 5. Update existing & establish new sustainable community design & regulatory provisions



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Green Building Codes (HCD)

Status:

- Originally excluded indoor water conservation measures due to product unavailability
- Staff now proposes including measures
 Products available
 Regional water shortage

Next Steps:

• Present ordinance in April '09 (8/09 effective date)



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Carbon Savings Benchmark

Status:

- · Overly complicated compliance and enforcement
- CEC approval required (2-3 month review)
 Unfamiliar with "carbon equivalent" approach
 Cost effectiveness determination
- Staff proposes to wait for new 2008 Title 24 standards

Begin August 2009 15-20% over current (2005) standards



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Carbon Savings Benchmark

Next Steps:

- New CV standards will be a % over 2008 Title 24
- Consultant will finalize cost effectiveness analysis to help determine % threshold

15% Low Rise Residential 10% High Rise Residential/Non-Residential

- Alternative compliance method thru community design
 - Pounds/square foot of Carbon savings
- Present ordinance in April '09 (8/09 effective date)



#4 Green Building Standard

Mitigation Fee Program

Status:

· Program component not feasible at this time

High administrative & inspection costs

Unpredictable fund availability

Additional non-core program

Not cost recoverable



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Green Awareness Program

Status:

- Sustainable Community Outreach Program SDG&E Partnership
- · Sustainability Center

Permit Counter Desk

Website

On-line Reference Library

Next Steps:

· Additional training & outreach sessions





CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Community Design & Regulatory Provisions

Status:

- · Community Sustainability Program
 - > Initial AQIP Guidelines update underway
 - Future revisions in 4-6 months following technical evaluations
- · Zoning and Design Guidelines
 - > CVRP policy & building reference guides under review
 - > SANDAG draft SG design guidelines under review



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Community Design & Regulatory Provisions

Status:

- CVRP/NECSC Community Design Program
 - > CVRP provides foundation for generating low-carbon site development standards & guidelines
 - > Further evaluations needed
 - > January CEC grant application narrowly missed funding
 - > Reviewing NECSC grant proposal for re-submittal in April



CLIMATE PROTECTION MEASURES

#4 Green Building Standard

Community Design & Regulatory Provisions

Next Steps:

- Present initial AQIP Guidelines update in April '09
- Present report on potential zoning standards & design guidelines for feedback in May '09
- Form Community Site Design Stakeholder Working Group (if CEC grant awarded)

4-6 months to develop proposals



CLIMATE PROTECTION MEASURES

#5 Energy Efficiency & Solar Conversion

Facilitate widespread installation of energy efficiency and solar energy systems on commercial, residential and municipal facilities by developing and implementing a solar & energy efficiency conversion program







#5 Energy Efficiency & Solar Conversion

Community Program
Status: "Home Upgrade – Carbon Downgrade"

- Working with CCSE & CEC to finalize program
 Product Specs, Incentives, Energy Savings,
 Min Warranty, Max Price, Contract Transparency
- Hosted an industry forum to receive feedback
- Additional meetings with vocational/educational representatives
- Initial discussions with consultants & financing entities



#5 Energy Efficiency & Solar Conversion Community Program Next Steps: • Continue program development Continue financing structure Build on local retail opportunities Vocational integration First phase options

CLIMATE PROTECTION MEASURES

#5 Energy Efficiency & Solar Conversion

Municipal Building Codes

Status:

- Modified existing "Pre-Plumbing" code to provide greater clarity and compliance
- Developed a new "Pre-Wiring" ordinance
- Both ordinances designed to foster & improve costeffectiveness of future solar energy installations
- Apply to all new residential units
- Council approved in January 2009



CLIMATE PROTECTION MEASURES

#5 Energy Efficiency & Solar Conversion

Municipal Building Codes

Next Steps:

- Train permit counter staff & inspectors on new regulations
- Update Policy Code Title 20 -

Provide Consumer Options

Encourage Market Development

Remove Structural & Policy Barriers



CLIMATE PROTECTION MEASURES

#5 Energy Efficiency & Solar Conversion

Municipal Solar Energy Systems

Status:

• City currently has 75 kW of solar PV systems

Police HQ (35 kW)

Public Works Corp Yard (4 kW)

Nature Center (6 kW)

New Civic Center Building (30 kW)

 New solar hot water system recently installed at Loma Verde Aquatic Center



CLIMATE PROTECTION MEASURES

#5 Energy Efficiency & Solar Conversion

Municipal Solar Energy Systems

Next Steps:

- Staff working on RFP to install solar energy systems at multiple municipal facilities
- Maximize "peak" generation for shortest payback period
- \bullet At least 20% & up to 100% renewable energy for City facilities (City 2005 Policy)
- New solar hot water system at Parkway Aquatic Center
- Building efficiency & public lighting



#6 Smart Growth Around Trolley Stations

Facilitate "Smart Growth" around the H Street, E Street and Palomar Street Trolley Stations to foster mixed-use, walkable and transit-friendly redevelopment



CLIMATE PROTECTION MEASURES

#6 Smart Growth Around Trolley Stations

Original Components:

- UCSP Implementation- E Street TFA
- · H Street Corridor Study
- Southwest Specific Plan(s)
- · Regional Efforts- I-5 Corridor Study



CLIMATE PROTECTION MEASURES

E Street Trolley Station - Chula Vista, CA



CLIMATE PROTECTION MEASURES

#6 Smart Growth Around Trolley Stations

Status:

- H St. 3-D SANDAG simulation at 75%; completion by March 2009
- H Street Corridor Study on hold pending future Council direction
- Series of Design Workshops being scheduled for southwest area between now & June 2009

Precursor to Specific Plan work

• I-5 Corridor Study commenced Jan 2009 (2-yr effort)



CLIMATE PROTECTION MEASURES

#6 Smart Growth Around Trolley Stations

Next Steps:

• Continue discussions with MTS on joint planning for E St. TFA

SANDAG SGIP Grant application

- · Await direction from CVRC and Council regarding H Street Corridor Study
- Complete H St. 3-D visual simulation- March 2009
- Conduct Southwest Design Workshops

SANDAG SGIP Grant application for Palomar Gateway District Specific Plan



CLIMATE PROTECTION MEASURES

#7 Turf Conversion Program

Coordinate with the Otay Water District, San Diego County Water Authority and the Sweetwater Authority to convert turf lawns to xeriscape or Water Smart landscaping







#7 Turf Conversion Program

NatureScape Outreach Program Status:

- Continue to provide on-site assessments for wildlife-friendly & water-smart landscaping features
- Over 100 "certified" yards and gardens
- Bimonthly cleanups & workshops at demonstration garden
- · Solicited new grant funding



scape



CLIMATE PROTECTION MEASURES

#7 Turf Conversion Program

Community & Municipal Turf Conversion

Status:

- Full program implementation has not begun due to limited funding availability
- Municipal initial facility audits pending
 Community may be incorporated into #5 pilot
- Additional funding sources are being identified & solicited



CLIMATE PROTECTION MEASURES

#7 Turf Conversion Program

Update Municipal Regulations

Status:

- Staff has begun reviewing DWR Model Landscape Ordinance
- New ordinance establishes landscape design criteria
 Maximum water allowance
- New development & major re-landscaping over 2,500 square feet



CLIMATE PROTECTION MEASURES

#7 Turf Conversion Program

Next Steps:

- Develop & distribute new NatureScape marketing pieces
- Update City's landscape ordinances to meet and possibly exceed state standard
- Initiate municipal turf conversions based on available funding
- Possibly incorporate community turf conversion opportunities into #5 pilot



CLIMATE PROTECTION MEASURES

Financing Strategy

- Full implementation costs
 One Time \$1,286,380
 Annual \$2,275,152
- Portfolio approach to financing measures Timelines & limitations Phased funding Context of broader budget issues
- Funding sources (Table 1)



CLIMATE PROTECTION MEASURES

Financing Strategy

- 1-6 Months
- SDG&E Partnership "Bridge Funding" Support measures #3,4 and 5
- Finalize Franchise Fee negotiations Council & public input Broader budget issues
- Finalize Master Fee Study Council approval Support measure #4
- Federal & State Grants
 Economic Stimulus Package
 Energy Efficiency & Conservation Block Grants



Financing Strategy

- 6 18 Months
- Full SDG&E Partnership Funding Support measures #3,4 & 5
- Continue pursuit of Local Fee Authority legislation
 Coordination with local representatives & stakeholders
 Council & public input
 Supports all measures
- Produce public bond proposal
 Council & public input
 Voluntary, participant and consumer choice driven
 Support measures #5 & 7



CLIMATE PROTECTION MEASURES

Financing Strategy

1.5 - 3 Years

- New Franchise Fee revenue redirected (phased) Supports all measures' annual costs
- Local Fee Authority revenue begins Supports all measures' annual costs
- Public bonds issued
 Supports citywide solar, energy & water efficiency projects
- Federal & State grants
 Use FF & LFA as match
 Support measures' one-time costs



